

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-143 (cancelled)

Claim 144 (original) A method of execution-instruction delegation between processing resources, comprising:

obtaining an execution instruction, wherein the execution instruction is obtained at a processing resource;

determining whether an operation-code within the execution instruction should be delegated to an other processing resource;

executing the execution instruction, if the operation-code within the execution instruction should not be delegated to an other processing resource;

routing the execution instruction to an other processing resource, if the operation-code within the execution instruction is for an other processing resource.

Claim 145. (original) The method of claim 144, wherein the method is completed within a single processing cycle.

Claims 146-154 (cancelled)

Claim 155 (original) The method of claim 144, wherein the operation-code indicates a type of resource on which to execute.

Claim 156 (original) The method of claim 144, wherein the other processing resource may be the originating processing resource.

Claim 157 (original) The method of claim 144, wherein a processing resource is an integer processing unit.

Claim 158. (original) The method of claim 144, wherein a processing resource is a mathematical processing unit.

Claim 159 (cancelled)

Claim 160 (original) The method of claim 144, wherein a processing resource is a vector processing unit.

Claims 161-163 (cancelled)

Claim 164 (original) The method of claim 144, wherein a processing resource is an execution-instruction processing cache.

Claim 165 (original) The method of claim 144, wherein routing occurs through an execution-instruction signal router.

Claim 166 (cancelled)

Claim 167. (original) The method of claim 144, wherein a processing resource may sleep while an other processing resource executes delegated execution-instructions.

Claim 168 (original) The method of claim 144, wherein the execution-instruction signal causes various processing resources dynamically to turn on and off to maintain a desired level of power draw while maximizing processing throughput.

Claim 169. (original) The method of claim 144, wherein the execution-instruction signal from processing resources themselves shuts off processing resources while idling.

Claim 170 (original) The method of claim 144, wherein the execution-instruction signal from processing resources themselves turn on processing resources when execution-instruction signal processing is required.

Claim 171. (original) The method of claim 144, wherein processing resources are communicatively disposed on a same die.

Claim 172. (original) The method of claim 171, wherein an execution-instruction signal router is on the same die with processing resources.

Claims 173-1614 (cancelled)